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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,482	03/26/1999	DEAN A. KLEIN	MPATENT.052A	3615

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EXAMINER	
SONG, HOSUK	
ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/277,482	KLEIN ET AL.
Examiner	**Art Unit**
HO S. SONG	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Mar 26, 1999* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-17* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *Mar 26, 1999* is/are a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *4,5*
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pond et al.(US 4,864,616) in view of Microsoft Press Computer Dictionary.

Claims 1,7: Pond disclose a digital data storage device in (col.3,lines 5-7). Pond disclose a logic circuit configured to receive digital data from a host processor and to forward the digital to digital data storage device in an encrypted form in (col.3,lines 5-18). Pond disclose a key accessed by logic circuit to define at least in part an encryption process,wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys, which are input to a key stream generator for generating key streams(col.5,lines 44-59;col.3,lines 19-23). Col.5,lines 35-44 clearly discloses data encrypted with the key streams becomes a protected file. Which is a storage means for storing the protected file. Pond does not specifically discloses a non-volatile memory location in or connected to logic circuit which stores an identification code. Pond does disclose storing ID code in a secure memory in (col.5,lines 35-43;col.3,lines 19-21). Microsoft dictionary discloses that secure

memory such as ROM is used to store code or data permanently. Motivation to use non-volatile memory such as ROM to store the master ID,machine ID,config ID would have been ability to prevent loss of IDs during power failure.

Claim 2: Pond disclose wherein the identification code is assigned to and associated with computing apparatus in (fig.1 and col.3,lines 19-35).

Claim 3: Pond disclose retrieving ID code from secure memory or non-volatile memory location without intervention by host processor in (col.6,lines 64-68;col.7,lines 1-11)..

Claim 4: Pond disclose wherein the logic circuit is configured to verifiy the key without intervention by host processor in (col.7,lines 23-38).

Claim 5: Pond disclose logic circuit selectively disabling logic circuit from encrypting the digital data in (col.6,28-34).

Claim 6: Pond disclose deriving a key additionally comprises for deriving at least in part from user input to computer system in (col.5,lines 28-30 and fig.1).

Claim 8: Pond disclose plurality of data storage media drives includes one or more hard disk drives and one or more floppy disk drives in (col.3,lines 5-18). It is well known in the art to include a hard drives and floppy drive in a personal computer.

Claim 9: Pond discloses various memory locations for storing keys and key streams in (fig.1). Wherein key is accessed by logic circuit to encrypt digital data. Pond does not specifically discloses a non-volatile memory location in or connected to logic circuit which stores an identification code. Pond does disclose storing ID code in a secure memory in (col.5,lines 35-

43;col.3,lines 19-21). Microsoft dictionary discloses that secure memory such as ROM is used to store code or data permanently. Motivation to use non-volatile memory such as ROM to store the master ID,machine ID,config ID would have been ability to prevent loss of IDs during power failure.

Claim 10: Pond disclose identification code is assigned to and associated specifically with computer in (col.3,lines 5-18).

Claim 11: Pond disclose a digital data storage device in (col.3,lines 5-7). Pond disclose a logic circuit configured to receive digital data from a host processor and to forward the digital to digital data storage device in an encrypted form in (col.3,lines 5-18). Pond disclose a key accessed by logic circuit to define at least in part an encryption process,wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys, which are input to a key stream generator for generating key streams(col.5,lines 44-59;col.3,lines 19-23). Col.5,lines 35-44 clearly discloses data encrypted with the key streams becomes a protected file. Which is a storage means for storing the protected file. Pond does not specifically discloses a non-volatile memory location in or connected to logic circuit which stores an identification code. Pond does disclose storing ID code in a secure memory in (col.5,lines 35-43;col.3,lines 19-21). Microsoft dictionary discloses that secure memory such as ROM is used to store code or data permanently. Motivation to use non-volatile memory such as ROM to store the master ID,machine ID,config ID would have been ability to prevent loss of IDs during power failure.

Claim 12: Pond disclose multiple data storage devices,wherein configuration register contains information enabling data encryption of data routed to a first one of at least two data storage devices, and configuration register contains information disabling data encryption data routed to a second one of at least two data storage devices in (col.6,lines 25-34).

3. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pond et al.(US 4,864,616).

In claims 13,14, Pond disclose a first memory location storing an identification code in (col.3,lines 19-21). Pond does not disclose a second memory location and an encryption engine to receive ID code from first memory and to store a key for use by encryption engine. Official notice is taken that second memory location and an encryption engine to receive ID code from first memory and to store a key for use by encryption engine is well known in the art. For example, crypto smart card is widely used as a location for second memory to store and retrieve and perform encryption function in a network. One of ordinary skill in the art would have been motivated to use second memory location to keep its data secure and since it is portable data can be removed and carried conveniently thus making hackers more difficult to defeat the system.

In claim 15, the examiner takes Official notice that use of a serial data bus is well known. One of ordinary skill in the art would have been motivated to use serial data bus in order to provide a reliable effective method of transmit input data to the site of processing.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pond et al.(US 4,864,616).

Claim 16: Pond discloses host computing logic and means for storing an identification code associated with host computing logic in (fig.1 and col.5,lines 20-43). Pond disclose deriving a key for data encryption at least in part from identification code in (col.5,lines 44-59,60-61;col.3,lines 19-23).

Claim 17: Pond disclose deriving a key additionally comprises for deriving at least in part from user input to computer system in (col.5,lines 28-30 and fig.1).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. .

a. Matsumoto et al.(US 6,286,008) key is generated from common information.

b. Kataoka et al.(US 5,857,021) apparatus ID and system ID are used to perform data access.

6. Any inquiry concerning this communication from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on 6:00 am - 4:00 pm, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes can be reached on 703-305-9711.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 3900.

HS
Hosuk Song

Gail Hayes

GAIL HAYES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100